

## Datasheet: VMA00045

|                      |                                      |
|----------------------|--------------------------------------|
| <b>Description:</b>  | MOUSE ANTI RETINOL BINDING PROTEIN 4 |
| <b>Specificity:</b>  | RETINOL BINDING PROTEIN 4            |
| <b>Other names:</b>  | RBP4                                 |
| <b>Format:</b>       | Purified                             |
| <b>Product Type:</b> | PrecisionAb™ Monoclonal              |
| <b>Isotype:</b>      | IgG1                                 |
| <b>Quantity:</b>     | 100 µl                               |

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

|                  | Yes | No | Not Determined | Suggested Dilution |
|------------------|-----|----|----------------|--------------------|
| Western Blotting | ■   |    |                | 1/1000             |

**PrecisionAb antibodies have been extensively [validated for the western blot application](#).** The antibody has been validated at the suggested dilution. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependant on sample type.

|                                 |                                                                                                                                                                                      |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Target Species</b>           | Human                                                                                                                                                                                |
| <b>Product Form</b>             | Purified IgG - liquid                                                                                                                                                                |
| <b>Preparation</b>              | Mouse monoclonal antibody purified by affinity chromatography on Protein A from tissue culture supernatant                                                                           |
| <b>Buffer Solution</b>          | Phosphate buffered saline                                                                                                                                                            |
| <b>Preservative Stabilisers</b> | 0.09% Sodium Azide (NaN <sub>3</sub> )                                                                                                                                               |
| <b>Immunogen</b>                | Human recombinant retinol binding protein 4                                                                                                                                          |
| <b>External Database Links</b>  | <p><b>UniProt:</b><br/> <a href="#">P02753</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">5950</a>   RBP4   <a href="#">Related reagents</a></p> |

**Specificity**      **Mouse anti Human retinol binding protein 4 antibody** recognizes human serum retinol binding protein 4 (RBP4), a 201 amino acid single-chain glycoprotein belonging to the [lipocalin](#) family,

which is responsible for the transport of Retinol (vitamin A1) from the liver to peripheral target tissues.

In plasma, the RBP4-retinol complex interacts with transthyretin preventing its loss by filtration through the kidney glomeruli. Defects in RBP4 are a cause of retinol-binding protein deficiency and can cause night vision problems ([Besch et al. 2003](#)). RBP4 gene variants have been implicated in insulin resistance ([Saucedo et al. 2014](#))

Mouse anti Human retinol binding protein 4 antibody recognizes free RBP4 and RBP4 in complex with transthyretin. It reacts with apo- as well as holo-RBP4. Mouse anti Human RBP4 antibody recognizes RBP4 as a single band of ~20 kDa in HepG2 cell line whole cell lysates by western blotting under reducing conditions.

|                                      |                                                                                                                                                                                                                     |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Western Blotting</b>              | Anti retinol binding protein 4 antibody detects a band of approximately 20 kDa in HepG2 cell lysates.                                                                                                               |
| <b>Instructions For Use</b>          | Please refer to the <a href="#">PrecisionAb western blotting protocol</a> . For additional information on secondary antibody dilution and exposure time see product web page.                                       |
| <b>Storage</b>                       | Store undiluted at -20°C, avoiding repeated freeze thaw cycles.                                                                                                                                                     |
| <b>Shelf Life</b>                    | As supplied, 12 months from date of despatch.                                                                                                                                                                       |
| <b>Acknowledgements</b>              | PrecisionAb™ is a trademark of Bio-Rad Laboratories.                                                                                                                                                                |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10040 available at:<br>Antibody (10040): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a> |
| <b>Regulatory</b>                    | For research purposes only                                                                                                                                                                                          |

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

**North & South** Tel: +1 800 265 7376

**America**

Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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